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Fax / Phone:

To: Examiner M. Monshipouri

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U.S. Patent and Trademark Office

(703) 872-9306

From: Ann-Louise Kernér, Ph.D.
617-526-6192

Date: March 8, 2004

Note: Please see the attached Information Disclosure Statements filed on May 13, 2003, June 6, 2003, and February 20, 2004 as requested by Examiner Monshipouri.

Client/Matter No.: 71369.172 and PFI0021
Return To: 2923

Transmitted by: _____

BOSTON LONDON* MUNICH* NEW YORK OXFORD* PRINCETON RESTON WALTHAM WASHINGTON

Hale and Dorr LLP is a Massachusetts Limited Liability Partnership and includes Professional Corporations

** an independent joint venture law firm*

BOSTON 1879928V1

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
(Attorney Docket Nos. 71369.172 and PFI-024US)

COPY

In re Application of: Blumenberg) Examiner: Monshipouri
Serial No. 09/659,737) Group Art Unit: 1652
Filing Date: September 11, 2000)

For: GENES AND POLYNUCLEOTIDES ASSOCIATED WITH ULTRAVIOLET RADIATION-MEDIATED SKIN DAMAGE AND USES THEREOF

CERTIFICATE OF FIRST CLASS MAILING UNDER 37 CFR 51.3

I hereby certify that this correspondence is being deposited with the United States Postal Service as First Class Mail addressed to: Mail Stop DD, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date below.

Date: 5/13/2003

Kimm A. Mauger
Kimm Mauger

Mail Stop DD
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

TRANSMITTAL LETTER

Dear Sir:

Enclosed herewith for filing in the above-identified patent application are the following documents:

1. Supplemental Information Disclosure Statement (2 pages);
2. Form PTO-1449 (1 page);
3. References as Cited (2);
4. Certificate of First Class Mailing, and;
5. Return Postcard.

Please charge the \$180.00 fee and any additional fees that might be due to Deposit Account No. 08-0219.

Respectfully submitted,

Date: May 13, 2003
HALE AND DORR LLP
60 State Street
Boston, MA 02109
(617) 526-6000
(617) 526-5000 (Facsimile)

Ann-Louise Kerner
Ann-Louise Kerner, Ph.D.
Reg. No. 33,523

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OFFICIAL

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
(Attorney Docket Nos. 71369.172 and PFI-024US)

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|-----------------------|--------------------|---|-----------------|-------------|
| In re Application of: | Blumenberg |) | Examiner: | Monshipouri |
| Serial No. | 09/659,737 |) | Group Art Unit: | 1652 |
| Filing Date: | September 11, 2000 |) | | |

For: GENES AND POLYNUCLEOTIDES ASSOCIATED WITH ULTRAVIOLET RADIATION-MEDIATED SKIN DAMAGE AND USES THEREOF

CERTIFICATE OF FIRST CLASS MAILING UNDER 37 CFR 51.8

I hereby certify that this correspondence is being deposited with the United States Postal Service as First Class Mail addressed to: Mail Stop DD, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date below.

Date: 5/13/2003Kimm Maugeri
Kimm Maugeri*****
Mail Stop DD
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

Dear Sir:

Applicant submits herewith the references on the attached form PTO-1449, copies of which are enclosed. This Information Disclosure Statement is being filed under 37 C.F.R. § 1.97 (c) (1), after the mailing of a first Office Action on the merits, but before the mailing date of either a Notice of Allowance or a Final Office Action. Each item of information contained in this Information Disclosure Statement was cited in a communication (copy enclosed) from a foreign patent office on a counterpart foreign application.

This submission does not represent that a search has been made and does not constitute an admission that the listed documents are material to the patentability of the invention, or that the listed documents are prior art. Applicant reserves the right to take appropriate action to establish the patentability of the disclosed invention over the listed documents, should one or more of the documents be applied against the claims of the present application. If it should be determined that any of the listed documents do not constitute prior art under United States law, Applicant reserves the right to present to the Officer the relevant facts and law regarding the appropriate status of such documents.

U.S. Patent Application No. 09/659,737
Supplemental Information Disclosure Statement
Page Two

It is respectfully requested that the Examiner initial and return copies of the enclosed form PTO-1449 with the next Patent Office communication.

Please charge the \$180.00 fee and any additional fee that might be due in connection with this matter to Deposit Account Number 08-0219.

If there are any questions, please call the undersigned at the telephone number indicated below.

Respectfully submitted,

Date: May 13, 2003
HALE AND DORR LLP
60 State Street
Boston, MA 02109
(617) 526-6000
(617) 526-5000 (Facsimile)

Ann-Louise Kerner
Ann-Louise Kerner, Ph.D.
Reg. No. 33,523

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|---|----------|----|----------|--|--|----------------------------------|--|
| Subt. For, PTO-1449 | | | | Docket Number 71369.172 | | Application Number 09/659,737 | |
| INFORMATION DISCLOSURE IN AN APPLICATION <i>(Use several sheets if necessary)</i> | | | | Applicant Blumenberg et al. | | | |
| | | | | Filing Date September 11, 2000 | | Group Art Unit 1652 | |
| Sheet | 1 | OF | 1 | | | | |

| U.S. Patent Documents | | | | | | |
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| EXAMINER INITIAL | DOCUMENT NUMBER | DATE | NAME | CLASS | SUBCLASS | FILING DATE IF APPROPRIATE |
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| Foreign Patent Documents | | | | | | | |
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| EXAMINER INITIAL | DOCUMENT NUMBER | DATE | COUNTRY | CLASS | SUBCLASS | TRANSLATION | |
| | 2 369 172 | Oct 21, 1999 | Canada | | | YES | NO |
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| Other Documents (Including Author, Title, Date Pertinent Pages, Etc.) | | |
|---|--|--|
| B15 | Abo et al., "PAK4, a Novel Effector for Cdc42Hs, is Implicated in the Reorganization of the Actin Cytoskeleton and in the Formation of Filopodia," EMBO Journal, Vol. 17, pp 6527-6540, 1998 | |
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| EXAMINER | DATE CONSIDERED |
| EXAMINER: Initial if citation is considered, whether or not citation is in conformance with MPEP § 609: Draw Line through citation if not conformance and not considered. Include copy with next communication to applicant. | |

BOSTON BOSTON 1508889v1

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
(Attorney Docket Nos. 71369.172 and PFI-024US)

COPY

In re: Application of: Blumenberg) Examiner: Monshipouri
Serial No. 09/639,737) Group Art Unit: 1652
Filing Date: September 11, 2000)

For: GENES AND POLYNUCLEOTIDES ASSOCIATED WITH ULTRAVIOLET RADIATION-MEDIATED SKIN DAMAGE AND USES THEREOF

Commissioner for Patents
1911 South Clark Place
Crystal Mall One
Receptionist 7th Floor
Alexandria, VA 22202
Attention: Examiner Monshipouri

SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

Dear Madam:

Applicant submits herewith the references on the attached form PTO-1449, copies of which are enclosed. This Information Disclosure Statement is being filed under 37 C.F.R. § 1.97 (c) (1), after the mailing of a first Office Action on the merits, but before the mailing date of either a Notice of Allowance or a Final Office Action.

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BOSTON 1679212v1

U.S. Patent Application No. 09/659,737
Supplemental Information Disclosure Statement
Page Two

It is respectfully requested that the Examiner initial and return copies of the enclosed form PTO-1449 with the next Patent Office communication.

Please charge the \$180.00 fee and any additional fee that might be due in connection with this matter to Deposit Account Number 08-0219.

If there are any questions, please call the undersigned at the telephone number indicated below.

Respectfully submitted,

Date: June 6, 2003
HALE AND DORR LLP
60 State Street
Boston, MA 02109
(617) 526-6000
(617) 526-5000 (Facsimile)

Gretchen A. Rice
Gretchen A. Rice, Ph.D.
Reg. No. 37,429

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|---|---|----|---|-----------------------------------|--|----------------------------------|--|
| Subt. For, PTO-1449 | | | | Docket Number 71369.172 | | Application Number 09/659,737 | |
| INFORMATION DISCLOSURE IN AN APPLICATION <i>(Use several sheets if necessary)</i> | | | | Applicant Blumenberg | | | |
| | | | | Filing Date September 11, 2000 | | Group Art Unit 1652 | |
| Sheet | 1 | OF | 1 | | | | |

| U.S. Patent Documents | | | | | | |
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| Foreign Patent Documents | | | | | | | |
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| EXAMINER INITIAL | DOCUMENT NUMBER | DATE | COUNTRY | CLASS | SUBCLASS | TRANSLATION | |
| | | | | | | YES | NO |
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| | | Other Documents (Including Author, Title, Date Pertinent Pages, Etc.) |
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| | | Latkowski et al., "Epidermal Cell Kinetics, Epidermal Differentiation, and Keratinization," Fitzpatrick's Dermatology in Medicine (book) 1999 McGraw Hill pp 133-144 |
| | | Herrlich et al., "The Mammalian UV Response: Mechanism of DNA Damage Induced Gene Expression," Advan. Enzyme Regul. Vol. 34, 1995, 381-395 |
| | | Ullrich et al., "The Role of Cytokines in UV-Induced Systemic Immune Suppression," Journal of Dermatological Science, Vol. 23, 2000 Abstract |
| | | Ouhiti et al., "Temporal Events in Skin Injury and the Early Adaptive Responses in Ultraviolet-Irradiated Mouse Skin," American Journal of Pathology, Vol. 156, No. 1, January 2000, pp 201-207 |
| | | Beissert et al., "Mechanisms Involved in Ultraviolet Light-Induced Immunosuppression," J. Investig. Dermatol. Symp. Proc., Vol. 4, No. 1, pp 61-63 |
| | | Barnes et al., "Mechanisms of Disease," The New England Journal of Medicine, Vol. 336, No. 15, Apr. 10, 1997, pp 1066-1071 |
| | | Osada et al., "YSK1, a novel mammalian protein kinase structurally related to Ste 20 and SPS1, but is not involved in the known MAPK pathways" Oncogene Vol. 14, 1997, pp 2047-2057 |

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| EXAMINER | DATE CONSIDERED |
| EXAMINER: Initial if citation is considered, whether or not citation is in conformance with MPEP § 609: Draw Line through citation if not conformance and not considered. Include copy with next communication to applicant. | |

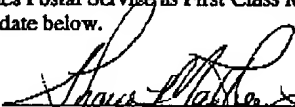
BOSTON BOSTON 1679415v1

COPY**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE****Appl. No.:** 09/659,737**Filing Date:** September 11, 2000**Applicant:** Blumenberg et al.**Examiner:** M. Monshipouri**Docket No.:** 71369.172 and PFI-024**Group Art Unit:** 1652**Cust. No.:** 23483**Title:** Genes and Polynucleotides Associated with Ultraviolet Radiation-Mediated Skin Damage and Uses Thereof

CERTIFICATE OF FIRST CLASS MAILING UNDER 37 CFR 51.8

I hereby certify that this correspondence is being deposited with the United States Postal Service as First Class Mail addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date below.

3/20/04
Mailing Date


Sharon Matthews

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

Dear Sir:

Applicants submit herewith the references on the attached form PTO-1449, copies of which are enclosed. This Information Disclosure Statement is being filed under 37 C.F.R. § 1.97 (c) (2), after the mailing of a first Office Action on the merits, but before the mailing date of a Notice of Allowance or an action that otherwise closes prosecution in the application. Each item of information contained in this Information Disclosure Statement was cited in a communication from a foreign patent office on a counterpart foreign application.

This submission does not represent that a search has been made and does not constitute an admission that the listed documents are material to the patentability of the invention, or that the listed documents are prior art. Applicant reserves the right to take appropriate action to establish the patentability of the disclosed invention over the listed documents, should one or more of the documents be applied against the claims of the present application. If it should be

BOSTON 1855830v1

U.S. Patent Application No. 09/659,737
Supplemental Information Disclosure Statement

determined that any of the listed documents do not constitute prior art under United States law, Applicant reserves the right to present to the Officer the relevant facts and law regarding the appropriate status of such documents.

It is respectfully requested that the Examiner initial and return copies of the enclosed form PTO-1449 with the next Patent Office communication.

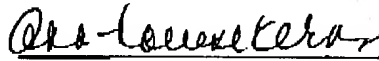
Applicants also respectfully request that the Examiner *initial* and return copies of the forms PTO-1449 that were submitted on *May 13, 2003* and *June 6, 2003* with the next Patent Office communication.

Please charge the fee set forth in 37 C.F.R. § 1.17(p) of \$180.00 and any additional fee that might be due in connection with this matter to Deposit Account Number 08-0219.

If there are any questions, please call the undersigned at the telephone number indicated below.

Respectfully submitted,

Date: 02/20/04


Ann-Louise Kerner, Ph.D.
Reg. No. 33,523

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Tel: (617) 526-6192
Fax: (617) 526-5000

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| Subt. For, PTO-1449 | | | | Docket Number 71369.172 and PFI-024US | | Application Number 09/659,737 | |
| INFORMATION DISCLOSURE IN AN APPLICATION <i>(Use several sheets if necessary)</i> | | | | Applicant Blumenberg et al. | | | |
| | | | | Filing Date September 11, 2000 | | Group Art Unit 1652 | |
| Sheet | 1 | OF | 1 | | | | |

| U.S. Patent Documents | | | | | | |
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| Foreign Patent Documents | | | | | | | |
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| Other Documents (Including Author, Title, Date Pertinent Pages, Etc.) | | |
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| C1 | Dorow et al., "Identification of a new family of human epithelial protein kinases containing two leucine/isoleucine-zipper domains," <i>Eur. J. Biochem.</i> , Vol. 213, No.2, 1993, 701-710 | |
| C2 | Su et al., "Signal transduction by the JNK MAPK cascade and ultraviolet light induced cytokine gene expression," <i>Photochemistry and Photobiology</i> , Vol. 67, Special Issue, 1998, 60S | |
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